

=====

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Tue Jul 24 19:21:26 EDT 2007

=====

\*\*\*\*\*

Reviewer Comments:

SEQUENCE LISTING<110> LAY LINE GENOMICS S.P.A.

S.I.S.S.A. Cattaneo, Antonino Covaceuszach, Sonia

Lamba, Doriano <120> Method for the humanization of antibodies and  
humanized antibodies thereby obtained<130> PCT 84150<140>  
PCT/IT2004/000722<141> 2004-12-23<150> RM2003000601<151> 2003-12-  
24<160> 40 <170> PatentIn version 3.1<210> 1<211> 369<212>  
DNA<213> Mus musculus<400> 1

caggtgcagc tggtgaaatc aggacctggt ctgggtgcagc cttcacagac cttgtccctc 60

The above is a sample of the submitted file. Please re-generate a sequence listing, using the PatentIn ".prj" (project) file.

\*\*\*\*\*

Application No: 10583618 Version No: 1.0

**Input Set:**

**Output Set:**

**Started:** 2007-07-02 22:22:20.554  
**Finished:** null  
**Elapsed:** null  
**Total Warnings:** 0  
**Total Errors:** 2  
**No. of SeqIDs Defined:** 0  
**Actual SeqID Count:** 1

Error code	Error Description
E 202	Invalid input format; Value must be an integer in <210> in SEQID
E 249	Order Sequence Error <210> -> <210>; Expected Mandatory Tag: <211> in Header

SEQUENCE LISTING<110> LAY LINE GENOMICS S.P.A. S.I.S.S.A.

Cattaneo, Antonino Covaceuszach, Sonia Lamba, Doriano <120> Method for the  
 humanization of antibodies and humanized antibodies thereby obtained<130> PCT 84150<140>  
 PCT/IT2004/000722<141> 2004-12-23<150> RM2003000601<151> 2003-12-24<160> 40 <170>  
 PatentIn version 3.1<210> 1<211> 369<212> DNA<213> Mus musculus<400> 1  
 caggtgcagc tggtaatc aggaccttgt ctggcgcgc cttcacatgc cttgtccctc 60  
 acctgcactg tctctgggtt ctcactaacc aacaacaatg tgaactgggt tcgacaggct 120  
 acaggaagag gtctggagtg gagtgaggaa gtctggctg gtggagccac agattacaat 180  
 tcagctctca aatcccgact gctgaccatc actaggacca cttccaagag ccaagtttc 240  
 ttaaaaatgc acatgctgca atctgaagac acagccactt actactgtgc cagagacggg 300  
 ggctatacgca gctctaccct ctatgctatg gatgcctggg gtcaagggac ttccggcacc 360  
 gtctccctca 369

<210> 2<211> 122<212> PRT<213> Mus musculus<400> 2

Gln Val Gln Leu Lys Glu Ser Gly Pro Gly Leu Val Gln Pro Ser Gln  
1 5 10 15

Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Phe Ser Leu Thr Asn Asn  
20 25 30

Gly Gly Val Trp Ala Gly Gly Ala Thr Asp Tyr Asn Ser Ala Leu Lys  
 50 55 60

Ser	Arg	Leu	Thr	Ile	Thr	Arg	Asp	Thr	Ser	Lys	Ser	Gln	Val	Phe	Leu
65					70					75					80

Lys Met His Ser Leu Gln Ser Glu Asp Thr Ala Thr Tyr Tyr Tyr Cys Ala  
85 90 95

Arg	Asp	Gly	Gly	Tyr	Ser	Ser	Ser	Thr	Leu	Tyr	Ala	Met	Asp	Ala	Trp
					100					105					110

Gly Gln Gly Thr Thr Val Thr Val Ser Ala  
115 120

<210> 3<211> 321<212> DNA<213> Rattus sp.<400> 3  
gacatccaga tgaccaggc tccagcttcc ctgtctgcata ctctgggaga aactgtcacc 60

atcgaatgtc gagcaagtga ggacatttat aatgcttag catgttatca gcagaagcca 120  
ggaaatctc ctcagtcct gatctataat acagataacct tgcatactgg ggtccatca 180  
cgattcagtgcagtgatc tggcacaca tattctctca agataaacag cctgcaatct 240  
gaagatgtcg caagtattt ctgtcagcac tattccatt atcctcggac gttcgggtgga 300  
gggaccaagc tggagatcaa a 321

<210> 4<211> 107<212> PRT<213> Rattus sp.<400> 4

Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Leu Gly  
1 5 10 15

Glu Thr Val Thr Ile Glu Cys Arg Ala Ser Glu Asp Ile Tyr Asn Ala  
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ser Pro Gln Leu Leu Ile  
35 40 45

Tyr Asn Thr Asp Thr Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60

Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser  
65 70 75 80

Glu Asp Val Ala Ser Tyr Phe Cys Gln His Tyr Phe His Tyr Pro Arg  
85 90 95

Thr Phe Gly Gly Thr Lys Leu Glu Leu Lys  
100 105

<210> 5<211> 81<212> DNA<213> Homo sapiens<400> 5  
acaggcgcbc actccgaggt gcagctggtg gaatcaggag gtggctgggt gcagcccgga 60  
gggtccccgc gcctcagctg c 81

<210> 6<211> 81<212> DNA<213> Homo sapiens<400> 6  
tcctggagcc tgtcgAACCC agttcacatt gttgtgggt agtgagaagc cagaggcagc 60  
gcagctgagg cgcaaggacc c 81

<210> 7<211> 81<212> DNA<213> Homo sapiens<400> 7  
aactgggttc gacaggctcc agaaaaaggc ctggagtggtt tggaggaggc ctgggttgtt 60  
ggagccacacg attacaattc a 81

<210> 8<211> 84<212> DNA<213> Homo sapiens<400> 8  
catttgttaag taagctgtgt tcttggaggt gtcgcgactg atggtaatc gggatttgag 60  
agctgaatttgaatctgtgg ctcc 84

<210> 9<211> 84<212> DNA<213> Homo sapiens<400> 9  
aagaacacag cttacttaca aatgaacagt ctgcgcgctg aagacacagc cgtttactac 60  
tgtgccagag acgggggcta tagc 84

<210> 10<211> 81<212> DNA<213> Homo sapiens<400> 10  
tgaggagacg gtgaccagag ttcccttgacc ccaggcatcc atagcataga gggtagagct 60  
gctatacgccc ccgtctctgg c 81

<210> 11<211> 78<212> DNA<213> Homo sapiens<400> 11  
acaggcgtgc actccgacat ccagatgacc cagtctccat cttccctgtc tgcatctgtg 60  
ggagaccgcg tcaccatc 78

<210> 12<211> 78<212> DNA<213> Homo sapiens<400> 12  
tggcttctgc tgataccatg ctaaaggcatt ataaatgtcc tcacttgctc gacatgtgat 60  
ggtgacgcgg tctccac 78

<210> 13<211> 78<212> DNA<213> Homo sapiens<400> 13  
gcatggtatac agcagaagcc agggaaagct cctaagctcc tgatctataa tacagataacc 60  
ttgcatacacag gggtccca 78

<210> 14<211> 78<212> DNA<213> Homo sapiens<400> 14  
caggctgctt atcgtgagag tatagtctgt accagatcca ctgccactga atcgtgatgg 60  
gaccctgtta tgcaaggt 78

<210> 15<211> 75<212> DNA<213> Homo sapiens<400> 15  
actctcacga taaggcgcct gcaacctgaa gatttcgcaa cttatctgt tcagcactat 60  
ttccattatc ctcg 75

<210> 16<211> 75<212> DNA<213> Homo sapiens<400> 16  
caatctagaa ttctactcac gtttgatctc caccttggtc ctttgaccga acgtccgagg 60  
ataatggaaa tagt 75

<210> 17<211> 122<212> PRT<213> Homo sapiens<400> 17

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Leu Thr Asn Asn  
20 25 30

Asn Val Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45

Gly Gly Val Trp Ala Gly Gly Ala Thr Asp Tyr Asn Ser Ala Leu Lys  
50 55 60

Ser Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Ala Tyr Leu  
65 70 75 80

Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
85 90 95

Arg Asp Gly Gly Tyr Ser Ser Ser Thr Leu Tyr Ala Met Asp Ala Trp  
100 105 110

Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
115 120

<210> 18<211> 107<212> PRT<213> Homo sapiens<400> 18

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asp Ile Tyr Asn Ala  
20 25 30

Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
35 40 45

Tyr Asn Thr Asp Thr Leu His Thr Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80

Glu Asp Phe Ala Thr Tyr Phe Cys Gln His Tyr Phe His Tyr Pro Arg  
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
100 105

<210> 19<211> 117<212> PRT<213> Homo sapiens<400> 19

Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Glu Tyr  
20 25 30

Tyr Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45

Gly Leu Ile Asp Pro Glu Gln Gly Asn Thr Ile Tyr Asp Pro Lys Phe  
50 55 60

Gln Asp Arg Ala Thr Ile Ser Ala Asp Asn Ser Lys Asn Thr Ala Tyr  
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

Ala Arg Asp Thr Ala Ala Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu  
100 105 110

Val Thr Val Ser Ser  
115

<210> 20<211> 107<212> PRT<213> Homo sapiens<400> 20

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Arg Asp Ile Lys Ser Tyr  
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Val Leu Ile  
35 40 45

Tyr Tyr Ala Thr Ser Leu Ala Glu Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60

Ser Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Gly Glu Ser Pro Trp  
85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
100 105

<210> 21<211> 369<212> DNA<213> Mus musculus<400> 21  
gaggtgaagc tggtgagtc tgggggaggt ttagtgcagc ctggagggtc cctgaaactc 60  
tcctgtgcag cctctggatt cactttcagt acctatacca tgtcttgcc tcgccagaca 120  
ccagagaaga ggctggagtg ggtcgccatac attagtaaag gtggtggtac tacctactat 180  
ccagacactg taaagggccg attcaccatc tccaggaca atgcgaagaa caccctgtac 240  
ctgcaaatga gcagtctgaa gtctgaggac acggccttgtt attactgtgc aagaggggct 300  
atgtatggta acgatTTTT ctatcctatg gactactggg gtcaaggaac ctcagtccacc 360  
gtctcctca 369

<210> 22<211> 124<212> PRT<213> Mus musculus<400> 22

Glu Val Lys Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

Ser Leu Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr  
20 25 30

Thr Met Ser Trp Ala Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val  
35 40 45

Ala Tyr Ile Ser Lys Gly Gly Ser Thr Tyr Tyr Pro Asp Thr Val  
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr  
65 70 75 80

Leu Gln Met Ser Ser Leu Lys Ser Glu Asp Thr Ala Leu Tyr Tyr Cys  
85 90 95

Ala Arg Gly Ala Met Phe Gly Asn Asp Phe Phe Phe Pro Met Asp Arg  
100 105 110

Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser Ala  
115 120

<210> 23<211> 318<212> DNA<213> Mus musculus<400> 23  
gacattgttc tctccagtc tccagcaatc atgtctgcat ctctaggggga ggagatcacc 60  
ctaacctgca gtgccagctt gagtgtaagt tacatgcact ggtaccagca gaagtcaggc 120  
acttctccca agctcttgat ttatactaca tccaacctgg cttctggagt cccttctcgc 180  
ttcagtggca gtgggtctgg gaccttttat tctctcacaa tcagtagtgt ggaggctgaa 240  
gatgctgccc attattactg ccatcagtgg agtagttatc catggacgtt cggtggaggc 300  
accaagctgg aaatcaa 318

<210> 24<211> 106<212> PRT<213> Mus musculus<400> 24

Asp Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Leu Gly  
1 5 10 15

Glu Glu Val Thr Leu Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met  
20 25 30

His Trp Tyr Gln Gln Lys Ser Gly Thr Ser Pro Lys Leu Leu Ile Tyr  
35 40 45

Thr Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser  
50 55 60

Gly Ser Gly Thr Phe Tyr Ser Leu Thr Ile Ser Ser Val Glu Ala Glu  
65 70 75 80

Asp Ala Ala Asp Tyr Tyr Cys His Gln Trp Ser Ser Tyr Pro Trp Thr  
85 90 95

Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys  
100 105

<210> 25<211> 81<212> DNA<213> Homo sapiens<400> 25  
acaggcgcbc actccgaggt gcagctgctg gagtctgggg gaggttttagt gcagcctgga 60  
gggtccctgc gcctctcctg t 81

<210> 26<211> 81<212> DNA<213> Homo sapiens<400> 26

ccctggggcc tggcgagccc agctcatggt ataggtactg aaagtgaatc cagaggctgc 60  
acaggagagg cgcaaggacc c 81

<210> 27<211> 81<212> DNA<213> Homo sapiens<400> 27  
tgggctcgcc aggccccagg gaaggggctg gagtggtcg catacattag taaagggttgt 60  
ggtagtacct actatccaga c 81

<210> 28<211> 81<212> DNA<213> Homo sapiens<400> 28  
ttgcaggtaa agggtgttct tcgagttgtc cctggagatg gtgaatcgcc ccttacagt 60  
gtctggatag taggtactac c 81

<210> 29<211> 81<212> DNA<213> Homo sapiens<400> 29  
aagaacaccc tgtacctgca aatgaacagt ctgcgggctg aggacagcgc cgtctattac 60  
tgtgcaagag gggctatgtt t 81

<210> 30<211> 81<212> DNA<213> Homo sapiens<400> 30  
ggagacggtg accagggttc cttgacccca gcggtcata ggaaagaaaa aatcgttacc 60  
aaacatagcc cctcttgcac a 81

<210> 31<211> 78<212> DNA<213> Homo sapiens<400> 31  
acaggcgtgc actccgacat tttctcacc cagtctccat ccagcctgtc tgcgtctgtc 60  
ggggaccggg tcaccatt 78

<210> 32<211> 78<212> DNA<213> Homo sapiens<400> 32  
gcctggcttc tgctggtaacc agtgcataactcacacta gagctggcgc tgcaggtaat 60  
ggtgacccggg tccccgac 78

<210> 33<211> 78<212> DNA<213> Homo sapiens<400> 33  
tggtaccagc agaaggcagg caaggctccc aagctcctga tttatactac atccaacctg 60  
gcttctggag tcccttct 78

<210> 34<211> 75<212> DNA<213> Homo sapiens<400> 34  
cagactactg attgtgaggg tataatcggt cccagacccca ctgccgtga agcgagaagg 60  
gactccagaa gccag 75

<210> 35<211> 78<212> DNA<213> Homo sapiens<400> 35  
accctcacaa tcagtagtct gcagcctgaa gatttcgcca cctattactg ccatcaagtgg 60  
agttagttatc catggacg 78

<210> 36<211> 75<212> DNA<213> Homo sapiens<400> 36  
taagtttagat ctattctact cacgttttat ttccacacctg gtgcctccac cgaacgtcca 60  
tggataacta ctcca 75

<210> 37<211> 124<212> PRT<213> Homo sapiens<400> 37  
Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Thr Tyr  
20 25 30

Thr Met Ser Trp Ala Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45

Ala Tyr Ile Ser Lys Gly Gly Ser Thr Tyr Tyr Pro Asp Thr Val  
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Ser Ala Val Tyr Tyr Cys  
85 90 95

Ala Arg Gly Ala Met Phe Gly Asn Asp Phe Phe Phe Pro Met Asp Arg  
100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala  
115 120

<210> 38<211> 106<212> PRT<213> Homo sapiens<400> 38

Asp Ile Val Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met  
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Lys Leu Leu Ile Tyr  
35 40 45

Thr Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser

50

55

60

Gly Ser Gly Thr Asp Tyr Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu  
65 70 75 80

Asp Val Ala Thr Tyr Tyr Cys His Gln Trp Ser Ser Tyr Pro Trp Thr  
85 90 95

Phe Gly Gly Thr Lys Val Glu Ile Lys  
100 105

<210> 39<211> 122<212> PRT<213> Homo sapiens<400> 39

Glu Val Gln Leu Leu Glu Ser Gly Gly Leu Val Gln Pro Gly Gly  
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Thr Ser Gly Phe Thr Phe Thr Asp Tyr  
20 25 30

Tyr Met Asn Trp Val Arg Gln Ala Pr